# 3<sup>rd</sup> Harmonic Monday Meeting Minutes

Date: July 31, 2006 Time: 9:30 A.M.

Place: Trailer 157 Conference Room

### Attendees (P=Present):

C. Antoine		C. Cooper		E. Harms	P	A. Rowe	
T. Arkan	P	N. Dhanaraj	Р	T. Khabiboulline	P	N. Solyak	
L. Bellantoni		H. Edwards	Р	D. Mitchell	P	W-D Moeller	P
C. Boffo		M. Foley	P	D. Olis	P	G. Wu	
H. Carter	Р	C. Ginsburg		P. Pfund	Р		

Minutes recorded by Dan

Minutes are posted at: http://tdserver1.fnal.gov/dolis/39GHz minutes.html

3.9GHz Project page is: <u>www-a0.fnal.gov</u>

## **Meeting Minutes**

Helen attended by phone from DESY.

### **HOM Couplers**

- Elvin reports a current total of (4) coupler rec'd from Ceramtec.
- Don has prints done of modified JLAB design.
- Elvin will talk to C. Reese at JLAB for feedback on redesign drawings and what fixtures are req'd.

#### **HOM** bodies

- D. Mitchell reports that Formteils were CNC machined, not EDM'd. Does using water based coolants contribute to hydrogen content of probe? M. Foley will look up DESY spec. regarding use of coolants.
- Cavity-2 HOM bodies are cut off. Mike discussed how bodies will be replaced. Formteil failures discussed some more. No conclusions yet.
- Timer, Wolf-Dietrich, and Jacek Sekutowicz have developed a plan to test a new F-probe design on copper prototype cavities. Jacek recommends adding a 2<sup>nd</sup> HOM body to each end. Effect of this on input coupler's Q-external and overall heat loads on cavity was discussed. Genfa will discuss these items in more detail with these three.
- M. Foley will prepare some weld samples to simulate welds on cavity-1 HOM body. This will be used to understand weld shrinkage for proper design of replacement cap for failed body.

### Cavity-3 fabrication

- M. Foley reports status unknown but expects cavity shortly. Will check on delivery.
- Helen proposes a plan be developed for inspection of cavity-3 during all processing. Will discuss with Allan Rowe.

## Input Couplers

• Dan reports that all (6) couplers received from CPI. QC in process. Summary of measurements on all six Cold End Assemblies is forthcoming. One of (3) leak checked Cold End assemblies has slight leak. Same Cold End Assembly has antenna that measures 1mm short of tolerance. Another is short of tolerance by 0.2mm. Two Outer Conductor Assemblies and one Waveguide Assembly leak checked and are leak free. Mechanical measurements on Waveguide Assemblies started on Friday, last week. (4) Outer Conductor Assemblies show dark streaking in copper plating and one shows apparent blistering. Dan will discuss these issues with CPI.